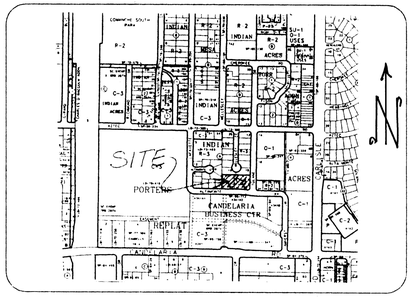
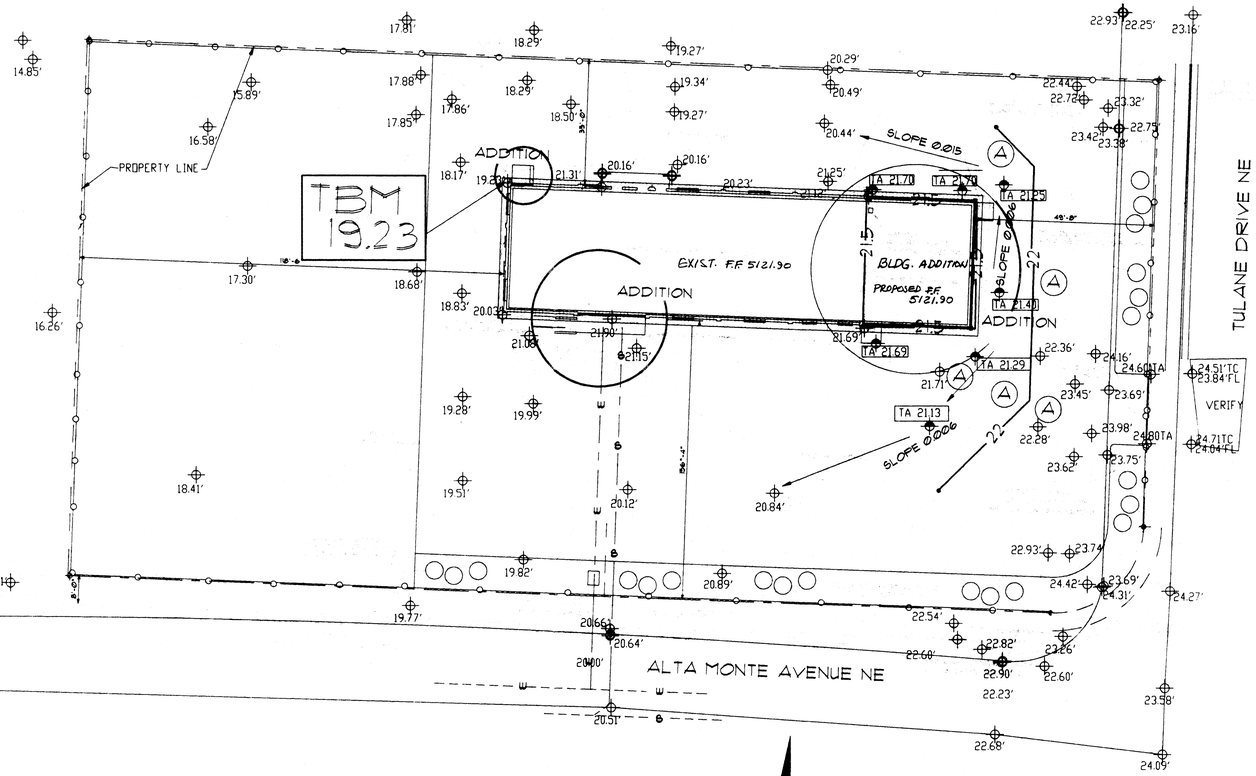


VICINITY MAP
NOT TO SCALE

A CHILD'S PLAYGROUND

DRAINAGE & GRADING PLAN

3305 ALTAMONTE AVENUE NE
ALBUQUERQUE, NEW MEXICO



TBM: NW CORNER OF BUILDING ELEVATION 19.23

BENCHMARK: 1-G17 ELEVATION 5,130,10

N

SITE PLAN

SCALE: 1" = 20'-0"

LEGEND

	EXISTING CONTOUR LINE
21	PROPOSED CONTOUR LINE
	EXISTING OVERHEAD LINE
19.08' TA	EXISTING TOP OF ASPHALT ELEVATION
18.41'	EXISTING SPOT ELEVATION
19.08' TC 18.41' FL	EXISTING TOP OF CURB ELEVATION EXISTING FLOWLINE ELEVATION
	PROPOSED LANDSCAPE AREA
TA 21.65	PROPOSED SPOT ELEVATION TOP OF ASPHALT
TC 22.20 FL 21.70	PROPOSED TOP OF CURB ELEVATION PROPOSED FLOWLINE ELEVATION
	PROPOSED DIRECTION OF FLOW

NOTE:

1. THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY.
2. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON MAPS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL UTILITIES, SHOWN OR NOT SHOWN ON THIS DRAWING, PRIOR TO ANY EXCAVATIONS.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
4. CONTRACTOR IS RESPONSIBLE FOR KEEPING RUN-OFF ON SITE DURING CONSTRUCTION AND CLEANING UP SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY AND ADJOINING PROPERTIES AFTER CONSTRUCTION.

KEYED NOTES:

(A) REMOVE AND REPLACE ASPHALT PAVEMENT AS NECESSARY FOR SMOOTH RIDING TRANSITION.

C:\DRAINAGE\ALTAMONT/CGAR/CT

DRAINAGE AND GRADING PLAN FOR A CHILD'S PLAYGROUND

LEGAL DESCRIPTION: LOT 8A AND 9A INDIAN ACRES SUBDIVISION

ADDRESS: NW corner, Tulane and Altamonte NE, (3305 Altamonte NE)

Zone Atlas G-16

FLOODPLAIN INFORMATION: The property is located in Zone X, areas outside the 500-year flood, according to the Floodway Boundary and Floodway Map of the City of Albuquerque, New Mexico, Community Panel 35001C0351 D, effective September 20, 1996.

EXISTING CONDITIONS: The subject property contains an area of approximately one acre. An existing building which is presently used as a day-care center, has asphalt-paved parking lot in front (south) and asphalt-paved drive areas on its north and east sides. About a third of the property is unpaved.

The property is bounded on the south by Alta Monte Ave. (paved, curb and gutter and sidewalk); on the west by existing apartments, on the north by existing residences, and on the east by Tulane Ave. (paved, curb and gutter, sidewalk).

OFFSITE RUN-OFF: The site receives no offsite flows.

PROPOSED IMPROVEMENTS: A building with a roof area of approximately 1,080 square feet will be built. The impervious area (1,080 SF of roof) that will be created by the proposed building addition will replace an equal amount of impervious area (1,080 SF of asphalt). An additional benefit of the proposed improvement is the creation of landscape strips which will decrease the site runoff rate and volume.

CALCULATIONS:

Existing Conditions:
- Land Treatment A = 0
- Land Treatment B = 0
- Land Treatment C = 17,715 SF = 0.41 Ac.
- Land Treatment D = 27,225 SF = 0.63 Ac.
- TOTAL 1.04 Acres

Proposed Improvement:
- Land Treatment A = 0
- Land Treatment B = 4,000 SF = 0.10 Ac.
- Land Treatment C = 17,715 SF = 0.41 Ac.
- Land Treatment D = 23,225 SF = 0.53 Ac.

Zone 2 (From DPM 22.2, page A-1)

Existing Condition

Peak Discharge, 100-year: C = 3.14, D = 4.70 (DPM 22.2, A-9)

Q_{100} = (0.41 x 3.14) + (0.63 x 4.70) = 4.24 cfs

Volume of Runoff,
Excess Precipitation
100-year: C = 1.13, D = 2.12 (from DPM 22.2, A-7)

V_{100} =(0.41 x 1.13 x 43,560/12)+(0.63 x 2.12 x 43,560/12) = 6,529 cf

Proposed Improvement:

Peak Discharge, 100-year
- Land Treatment B, 100-year: 2.28 cfs
- Land Treatment C, 100-year: 3.14 cfs
- Land Treatment D, 100-year: 4.70 cfs

Q_{100} = (0.10 x 2.28) + (0.41 x 3.14) + (0.53 x 4.70) = 3.99 cfs

Volume of Runoff, 100-year:
- Excess Precipitation, Land Treatment B = 0.78
- Excess Precipitation, Land Treatment C = 1.13
- Excess Precipitation, Land Treatment D = 2.12

V_{100} = (0.10 x 0.78 x 43,560/12) + (0.41 x 1.13 x 43,560/12) + (0.53 x 2.12 x 43,560/12) = 6,015 cf

Change:
- Discharge, Q_{100} = 4.24 - 3.99 = 0.25 cfs (decrease)
- Volume, V_{100} = 6,529 - 6,015 = 514 cf (decrease)

EROSION CONTROL: Water, if any, from activities during construction and/or from rain will be temporarily ponded on site to prevent the spread of silt.

CONCLUSION: The grading and drainage plan for the proposed construction on the subject property will not have any adverse impact on or will be adversely affected by the existing drainage from the surrounding areas.

###

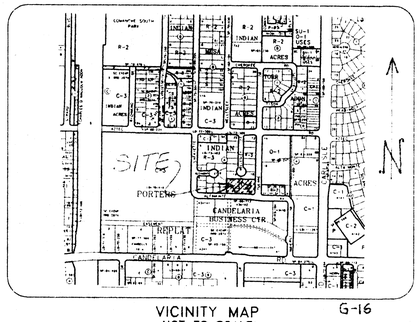
Curtis Strahan 4/13/98

A CHILD'S PLAYGROUND

3305 ALTAMONTE AVENUE NE

DRAINAGE & GRADING PLAN

RHOMBUS P.A., INC.
FACILITIES ENGINEERS ◊ ENVIRONMENTAL CONSULTANTS
2620 San Mateo NE SUITE B
Albuquerque, NM 87110
TEL. (505) 881-6690 FAX (505) 881-6896

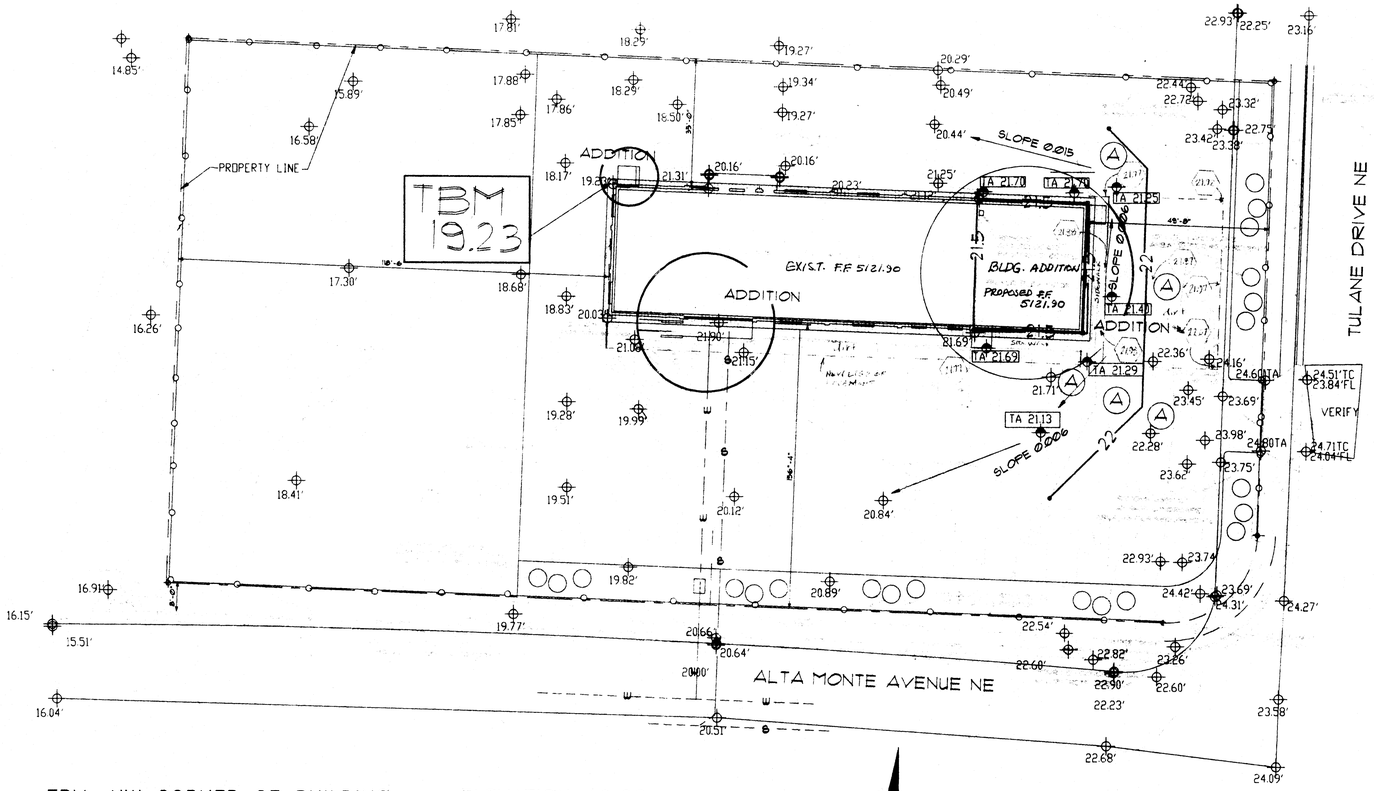


VICINITY MAP G-16
NOT TO SCALE

A CHILD'S PLAYGROUND

DRAINAGE & GRADING PLAN

3305 ALTAMONTE AVENUE NE
ALBUQUERQUE, NEW MEXICO



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BENCHMARK: 1-G17 ELEVATION 5,130.10

SITE PLAN

SCALE: 1" = 20'-0"

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	PROPOSED LANDSCAPE AREA
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	PROPOSED DIRECTION OF FLOW
21.82	AS BUILT SPOT ELEVATION

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DRAINAGE AND GRADING PLAN FOR A CHILD'S PLAYGROUND

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Excess Precipitation
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CONCLUSION: The grading and drainage plan for the proposed construction on the subject property will not have any adverse impact on or will be adversely affected by the existing drainage from the surrounding areas.

###

JAMES L. HEWITT, JR. NEW MEXICO 6871 REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THE SUBJECT FACILITY WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED DRAINAGE AND GRADING PLAN.

JAMES L. HEWITT, JR., P.E. #6871 02/17/99
DATE

4/13/98

A CHILD'S PLAYGROUND

3305 ALTAMONTE AVENUE NE
DRAINAGE & GRADING PLAN

RECEIVED FEB 17 1999 HYDROLOGY SECTION

RHOMBUS P.A., INC.
FACILITIES ENGINEERS ◊ ENVIRONMENTAL CONSULTANTS
2620 San Mateo NE SUITE B
Albuquerque, NM 87110
TEL. (505) 881-6690 FAX (505) 881-6896

C:\DRAINAGE\ALTAMONT\CGAR\CT

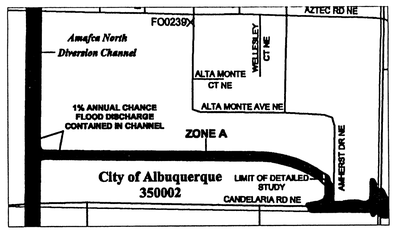
GRADING & DRAINAGE PLAN

THE PROPOSED DAY-CARE EXPANSION PROJECT IS LOCATED IN THE CANDELARIA-125 COMMERCIAL AREA OF THE CITY OF ALBUQUERQUE. THE GRADING AND DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

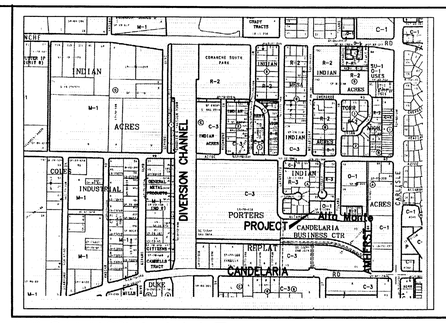
1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND IMPROVEMENTS, AND EXISTING STREET.
2. PROPOSED IMPROVEMENTS: A 4000 SF BUILDING, PRIVATE ASPHALT DRIVEWAY AND PARKING, NEW GRADE ELEVATIONS, DRAINAGE, AND LANDSCAPING COMPLIANCE IMPROVEMENTS/UPGRADING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION OF DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS WHICH CONTRIBUTE TO THE EXISTING FLOWS.

PRESENTLY, THE SITE IS ESTABLISHED AND USED AS A DEVELOPED ANCILLARY PLAYGROUND AREA FOR THE EXISTING FACILITY TO THE EAST. THE PLAYGROUND CURRENTLY IS 2/3 GRAVEL SURFACING LOCATED IN THE SOUTHERN AREA. THE SITE IS BOUNDED BY DEVELOPED MULTI-FAMILY ON THE NORTH /COMMERCIAL PROPERTY TO THE WEST. ALTA MONTE AVE. ON THE SOUTH IS A 40 FEET WIDE PAVED CITY MAINTAINED LOCAL STREET WITH SIDEWALK. THE SITE TERRAIN SLOPES FROM EAST TO NORTHWEST AT 5%

THE SITE IS NOT WITHIN OR ADJACENT TO A DESIGNATED FEMA FLOOD HAZARD ZONE. DEVELOPED LOT RUNOFF WILL BE PERMITTED TO DRAIN TO THE STREET. FREE DISCHARGE OF PROJECT RUNOFF IS ACCEPTABLE SINCE DOWNSTREAM DRAINAGE FACILITIES EXIST. A PORTION OF SITE RUNOFF IS ROUTED THROUGH PROPOSED LANDSCAPING AS 'POINT RAINFALL, ...SEE CALCULATIONS.

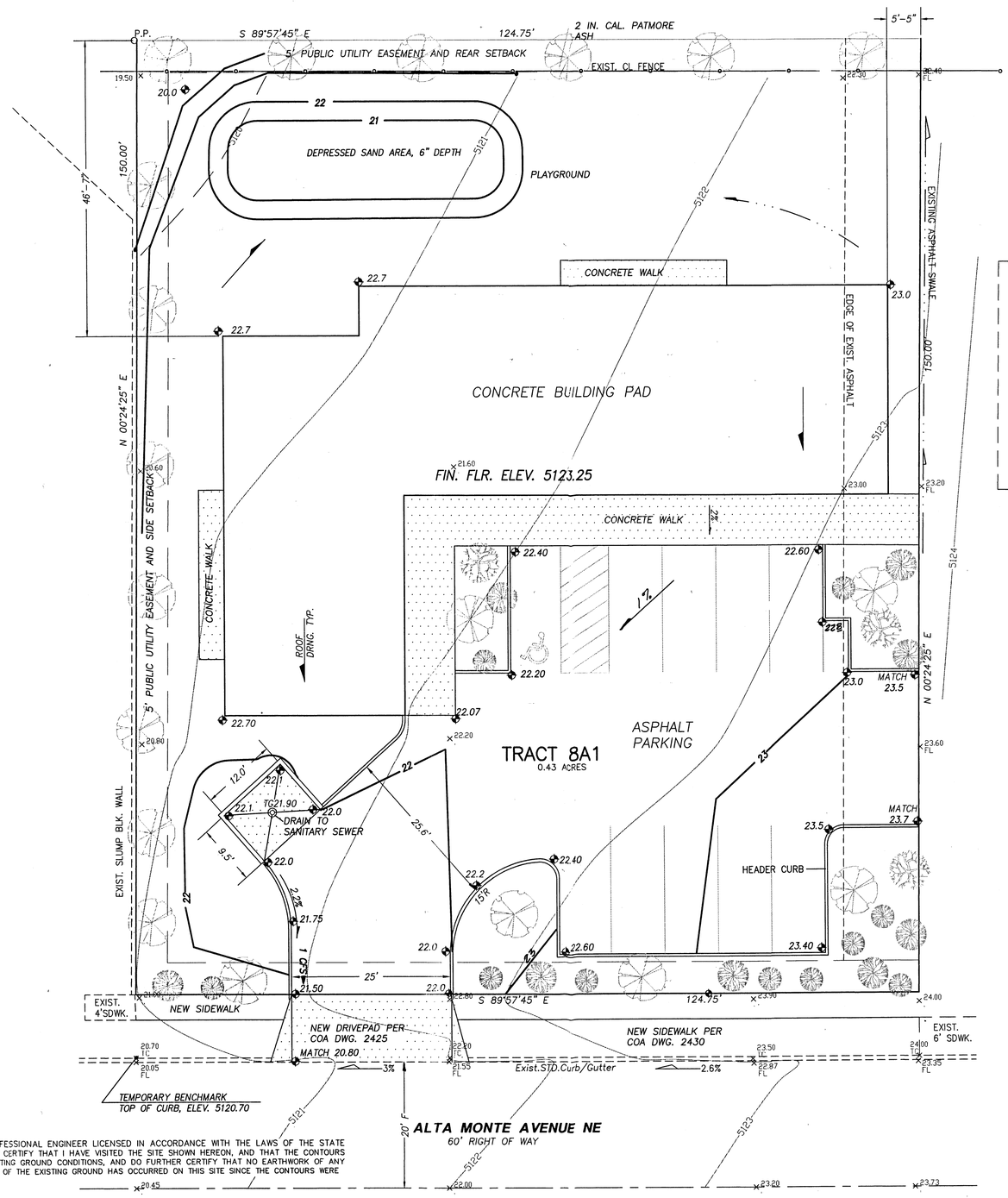


FIRM MAP PANEL # 351 F



VICINITY MAP ZONE G-16

Scale: 1" = 10'



NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION W/ UPDATES.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL.
5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1.
8. NEW ASPHALT PAVEMENT SHALL CONSIST OF 3" ASPHALT CONCRETE OVER 6" AGGREGATE BASE COURSE ON 8" COMPACTED SUBGRADE, 95% PROCTOR, ASTM D-1557

LEGEND

+24.0	EXIST. SPOT ELEVATION
10	EXIST. CONTOUR
24.0	NEW SPOT ELEVATION
54	NEW CONTOUR
	NEW SWALE
	DRAINAGE DIRECTION, EXISTING
FL	FLOWLINE
PP	EXISTING POWER POLE
NG OR G	NATURAL GROUND, EXISTING
R/C	REBAR AND CAP, EXISTING
CLF	CHAIN LINK FENCE, EXISTING
	NEW P.C.C., CONCRETE
TG	TOP OF GRATE (W/ ELEV.)

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM)
REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE, ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 Inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS 71% B (SAND), 29% HARDPAN 'C',

LOT AREA = 0.43 ACRES, WHERE EXCESS PRECIP. 'W' =0.88 in. [0.35]
PEAK DISCHARGE, Q100 = 1.1 CFS [0.6], WHERE UNIT PEAK DISCHARGE = 2.5 CFS/AC. [1.3]
THEREFORE: VOLUME 100 = 1374 CF [546]

DEVELOPED CONDITIONS (Includes Paved Parking)

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	~~0.00 Ac.(0%)~~	A	1.56[0.38]	0.53[0.13]
LANDSCAPING/Depress	0.15 Ac.(35%)	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	0.05 Ac.(12%)	C	3.14[1.71]	1.13[0.52]
ROOF - PAVEMENT	0.23 Ac.(53%)	D	4.70[3.14]	2.12[1.34]
	0.43 Ac.			

THEREFORE: $E_{Weighted}$ = 1.53 In.[0.87] &

Q100 =1.6 CFS VOLUME 100 = 2388 CF
Q10 =1.0 CFS VOLUME 10 = 1358 CF

DOWNSTREAM ANALYSIS

THE INCREASE OF RUNOFF RATE IS CONSIDERED MINIMAL FROM THE EXISTING CONDITIONS (0.5 CFS); THE DIFFERENCE WILL BE ROUTED INTO DEPRESSED LANDSCAPE AREA(S), THE REMAINING TWO-THIRDS OR 1 CFS WILL FREE-DISCHARGE TO THE STREET.

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PHILIP W. CLARK NMPE #10265

PROJECT DATA

LEGAL DESCRIPTION

TRACT 8A-1, BLOCK A, INDIAN ACRES SUBDIVISION
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK (NAVD 88)

TOP OF CURB AT THE PROJECTION OF PROJECT SOUTHWEST CORNER
SEE PLAN, ELEVATION = 5120.70, AS TIED FROM ACS CONTROL MONUMENT
P-225 (ELEV. 5102.67) LOCATED @ THE SW QUADRANT OF LAFAYETTE/AZTEC

TOPOGRAPHIC DESIGN SURVEY DATA

COMPILED BY CLARK CONSULTING ENGINEERS, FEBRUARY 2007

RECEIVED
MAR 07 2007
HYDROLOGY SECTION

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER 3.7.07

Clark Consulting Engineers
19 Ryan Road
Edgewood, New Mexico 87015
Tele: (505) 281-2444 Fax: (505) 281-2444

DATE	REVISION

TR. 8A-1 OF BLOCK A, INDIAN ACRES
ALBUQUERQUE, NEW MEXICO
3301 ALTA MONTE AVENUE, NE

Grading & Drainage Plan

DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: WEAVER_VASS	1 OF 1
CHECKED BY: PWC	DATE: 1/12/07	FILE #: G/D	

GENERAL NOTES

DESIGN CRITERIA

1. All work shall conform to the 2003 International Building Code.
   Live loads:
   Roof load 20 psf
   Floor load 40 psf
   Seismic zone 2b requirements
   Wind loading 75 mph, exposure C
   2. Cast in place concrete:
   a. Compressive strength of cast in place concrete 3000 psi at 28 days
   b. Reinforcing steel shall be ASTM A-615 Grade 60 #5 and larger, Grade 40 #4 and smaller.
   3. Wood
   a. Unless otherwise noted on drawings lumber shall be No. 2 Ponderosa Pine with allowable repetitive use fiber bending stress of 975 psi, single use fiber bending stress of 850 psi, and elastic modulus of 1500000 psi.
   b. Where Hem-Fir is specified on plans it shall be No. 1 with allowable repetitive use fiber bending stress of 1200 psi, single use fiber bending stress of 1200 psi, and elastic modulus of 1500000 psi.
   c. Micro-Lam lumber shall satisfy the following design values:
   Bending (Fb) = 2600 psi
   Horizontal shear (Fv) = 285 psi
   Modulus of elasticity (E) = 1800000 psi
   Compression perpendicular to grain = 650 psi
   Compression parallel to grain (Fc) = 2460 psi
   Drilling or notching of Micro-Lam lumber is not allowed.
4. Design Soil bearing pressure 1500 psf with footings placed on natural ground and slab placed on engineered compacted fill.

CONSTRUCTION CRITERIA

1. Lap reinforcing bars 32 diameters unless otherwise noted.
2. Construction joints location and type shall have prior approval by Engineer.
3. Fill material shall consist of soils that conform to the following characteristics:

Sieve Size (Square openings)	Percent Passing by weight
3 inch	100
No. 4	50-100
No. 200	10-40

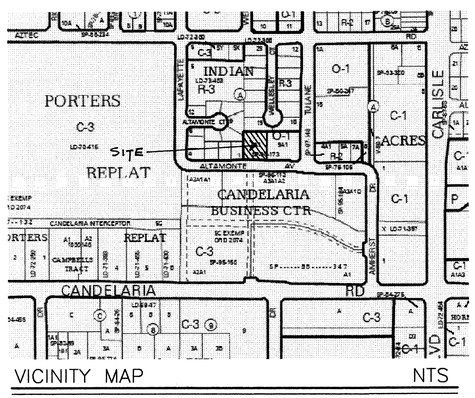
The plasticity index of the material shall not exceed 10. Testing shall be in conformance with ASTM D 423 and 424 for P.I. and D-1557 for density.

4. Where slabs are placed on fill the native soil shall be scarified to a minimum depth of 12 inches, watered as necessary to bring the moisture content as close as possible to optimum moisture content, and compacted to 95% of maximum density.
Fill shall be spread in loose depth layers not exceeding 8 in. watered and compacted. Moisture content at the time of compaction shall be 2% below optimum moisture or higher. A minimum density of 95% of maximum density shall be obtained.
Optimum moisture content and maximum density for each soil type shall be determined in accordance with ASTM D 1557.
5. Contractor is responsible for any temporary bracing required to hold structural elements in place until work is complete.
6. Contractor shall coordinate slab openings with Mechanical and Electrical drawings. (Mechanical and Electrical openings are not shown on Structural drawings.)
7. All conditions shown on the plan shall be field verified by the contractor. If discrepancies exist they shall be brought to the attention of the Architect and Engineer before work proceeds.

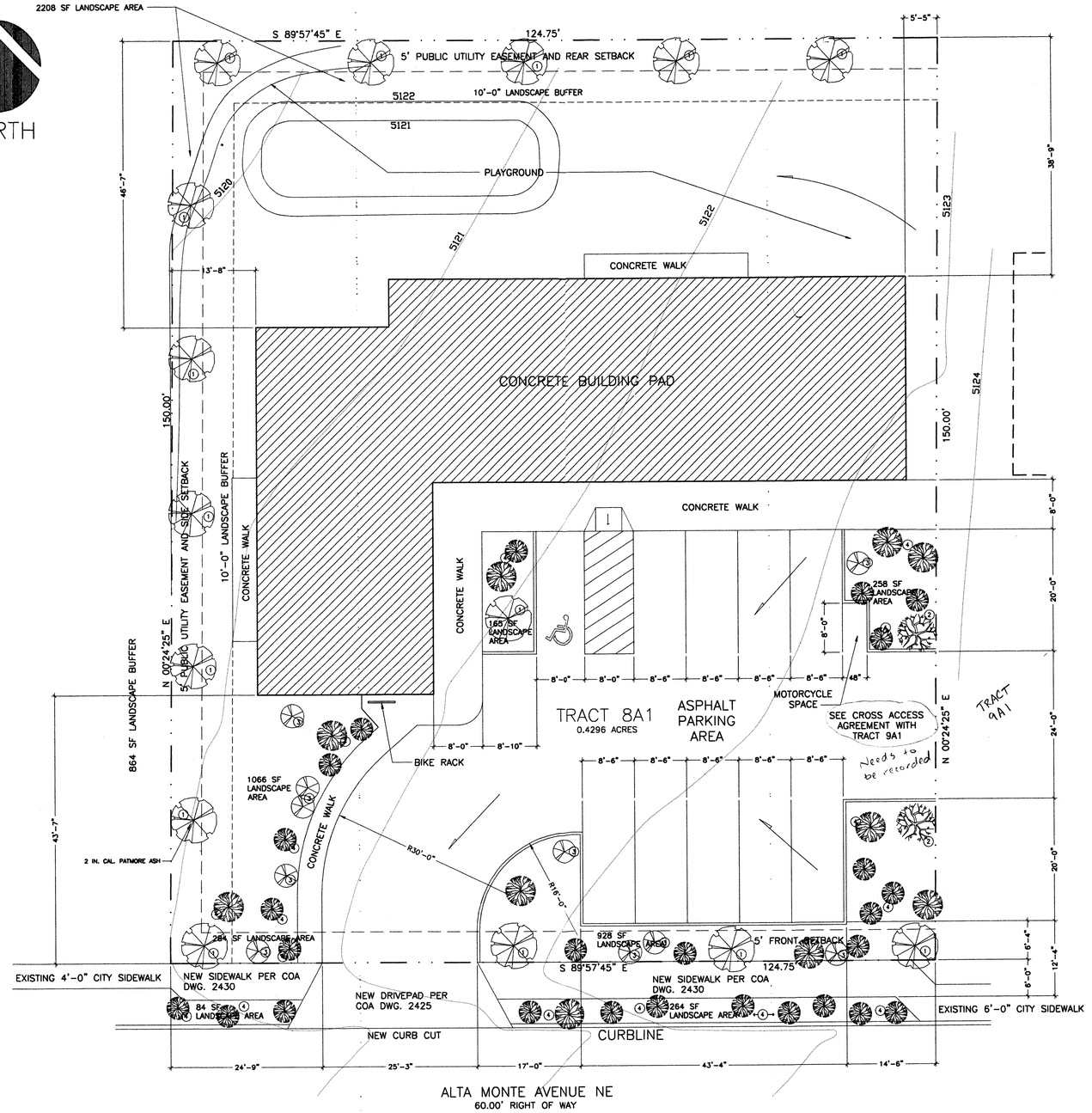
LANDSCAPE NOTES

DESIGN CRITERIA

1. Landscape and irrigation system maintenance shall be the responsibilty of the owner.
2. Landscape shall be watered by a complete underground irrigation drip system operated by automatic controller.
3. Plantings shall acheive a minimum 75% live ground cover at maturity.



VICINITY MAP NTS



SITE PLAN 1" = 10'-0"

TRAFFIC CIRCULATION LAYOUT APPROVED
Signed 4/6/07 Date

LANDSCAPE AREA REQUIRED:	
GROSS SITE AREA =	18,713 SF
BUILDING AREA =	4322 SF
RIGHT-OF WAY =	328 SF
NET SITE AREA =	14,063 SF
15% OF NET AREA = 2109 SF REQUIRED	
LANDSCAPE AREA PROVIDED:	4973 SF
VEGETATIVE GROUND COVER REQUIRED:	1582 SF

LANDSCAPE SCHEDULE

MARK	DESCRIPTION	SIZE
1	PATMORE ASH	2" CALIPER
2	BRADFORD PEAR	15 GALLON
3	DESERT WILLOW	5 GALLON
4	BUFFALO JUNIPER	1 GALLON

DRAWING INDEX	
A 1	SITE PLAN
A 1A	GRADING/DRAINAGE PLAN
A 2	FOUNDATION PLAN/DETAILS
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A 6	ELEVATIONS
P 1	PLUMBING PLAN
M 1	MECHANICAL PLAN
E 1	ELECTRICAL PLAN

BUILDING DATA

PROJECT:	DAY CARE CENTER
	3301 ALTA MONTE AVENUE NE
	ALBUQUERQUE, NEW MEXICO 87107
OWNER:	GOZFAST LLC
	604 CEDAR HILL ROAD NE
	ALBUQUERQUE, NEW MEXICO 87122
ARCHITECT:	J. KORY BAKER ARCHITECT
	P.O. BOX 254
	ESTANCIA, NEW MEXICO 87016
ZONE ATLAS MAP:	G-16-Z
ZONING CLASSIFICATION:	O-1
BUILDING TYPE:	EDUCATIONAL - DAY CARE
CONSTRUCTION TYPE:	VN
OCCUPANT LOAD:	
CLASSROOM #1	1120 SF/20 = 56
CLASSROOM #2	1120 SF/20 = 56
CLASSROOM #3	920 SF/20 = 46
CLASSROOM #4	492 SF/20 = 25
STORAGE/MECHANICAL	44 SF/300 = 1
	TOTAL OCCUPANCY = 184
OCCUPANCY GROUP:	GROUP E - DAY CARE
NUMBER OF FLOORS:	1 FLOOR
GROSS SQUARE FOOTAGE:	4322 SQ.FT.
ZONING ANALYSIS:	PARKING
PARKING REQUIRED:	
	2 SPACES PLUS 1 SPACE
	PER 500 SF NET LEASABLE AREA
	NET LEASABLE AREA = 3655 SF
	3655/500 = 8 + 2 = 10
	REQUIRED PARKING = 10 SPACES
	PROVIDED PARKING = 10 SPACES
	REQUIRED HC PARKING = 1 SPACE
	PROVIDED HC PARKING = 1 SPACE
	VAN ACCESSIBLE

CODES & RESTRICTIONS

THE BUILDING SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING:
- 2003 INTERNATIONAL BUILDING CODE
- ALL APPLICABLE CODES AND REGULATIONS OF BERNALILLO COUNTY, AND THE STATE OF NEW MEXICO

LEGAL DESCRIPTION

TRACT 8A1, PLAT OF TRACTS 8A1 AND 9A1, TRACT 6, BLOCK A, INDIAN ACRES SUBDIVISION

RECEIVED
MAR 13 2007
HYDROLOGY SECTION

DAY CARE CENTER

ALBUQUERQUE • NEW MEXICO

J. KORY BAKER • ARCHITECT
P.O. BOX 254 • ESTANCIA NM 87016
505 • 384 • 3112

STATE OF NEW MEXICO J. KORY BAKER NO. 2170 REGISTERED ARCHITECT 3-12-07

SHEET NUMBER A1
DRAWN BY:
REVISIONS:
DATE: 12-21-06

GENERAL NOTES

DESIGN CRITERIA

1. All work shall conform to the 2003 International Building Code.
   Live loads:
   Roof load 20 psf
   Floor load 40 psf
   Seismic zone 2b requirements
   Wind loading 75 mph, exposure C
   2. Cast in place concrete:

a. Compressive strength of cast in place concrete 3000 psi at 28 days

b. Reinforcing steel shall be ASTM A-615 Grade 60 #5 and larger, Grade 40 #4 and smaller.

3. Wood

a. Unless otherwise noted on drawings lumber shall be No. 2 Ponderosa Pine with allowable repetitive use fiber bending stress of 975 psi, single use fiber bending stress of 850 psi, and elastic modulus of 1500000 psi.

b. Where Hem-Fir is specified on plans ot shall be No. 1 with allowable repetitive use fiber bending stress of 1200 psi, single use fiber bending stress of 1200 psi, and elastic modulus of 1500000 psi.

c. Micro-Lam lumber shall satisfy the following design values:
   Bending (Fb) = 2600 psi
   Horizontal shear (Fy) = 285 psi
   Modulus of elasticity (E) = 1800000 psi
   Compression perpendicular to grain = 650 psi
   Compression parallel to grain (Fc) = 2460 psi

   Drilling or notching of Micro-Lam lumber is not allowed.

4. Design Soil bearing pressure 1500 psf with footings placed on natural ground and slab placed on engineered compacted fill.

CONSTRUCTION CRITERIA

1. Lap reinforcing bars 32 diameters unless otherwise noted.
2. Construction joints location and type shall have prior approval by Engineer.
3. Fill material shall consist of soils that conform to the following characteristics:

Sieve Size (Square openings)	Percent Passing by weight
3 inch	100
No. 4	50-100
No. 200	10-40

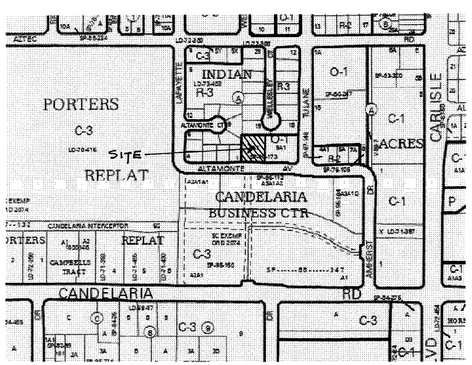
The plasticity index of the material shall not exceed 10. Testing shall be in conformance with ASTM D 423 and 424 for P.I. and D-1557 for density.

4. Where slabs are placed on fill the native soil shall be scarified to a minimum depth of 12 inches, watered as necessary to bring the moisture content as close as possible to optimum moisture content, and compacted to 95% of maximum density.
   Fill shall be spread in loose depth layers not exceeding 8 in. watered and compacted. Moisture content at the time of compaction shall be 2% below optimum moisture or higher. A minimum density of 95% of maximum density shall be obtained.
   Optimum moisture content and maximum density for each soil type shall be determined in accordance with ASTM D 1557.
5. Contractor is responsible for any temporary bracing required to hold structural elements in place until work is complete.
6. Contractor shall coordinate slab openings with Mechanical and Electrical drawings. (Mechanical and Electrical openings are not shown on Structural drawings.)
7. All conditions shown on the plan shall be field verified by the contractor. If discrepancies exist they shall be brought to the attention of the Architect and Engineer before work proceeds.

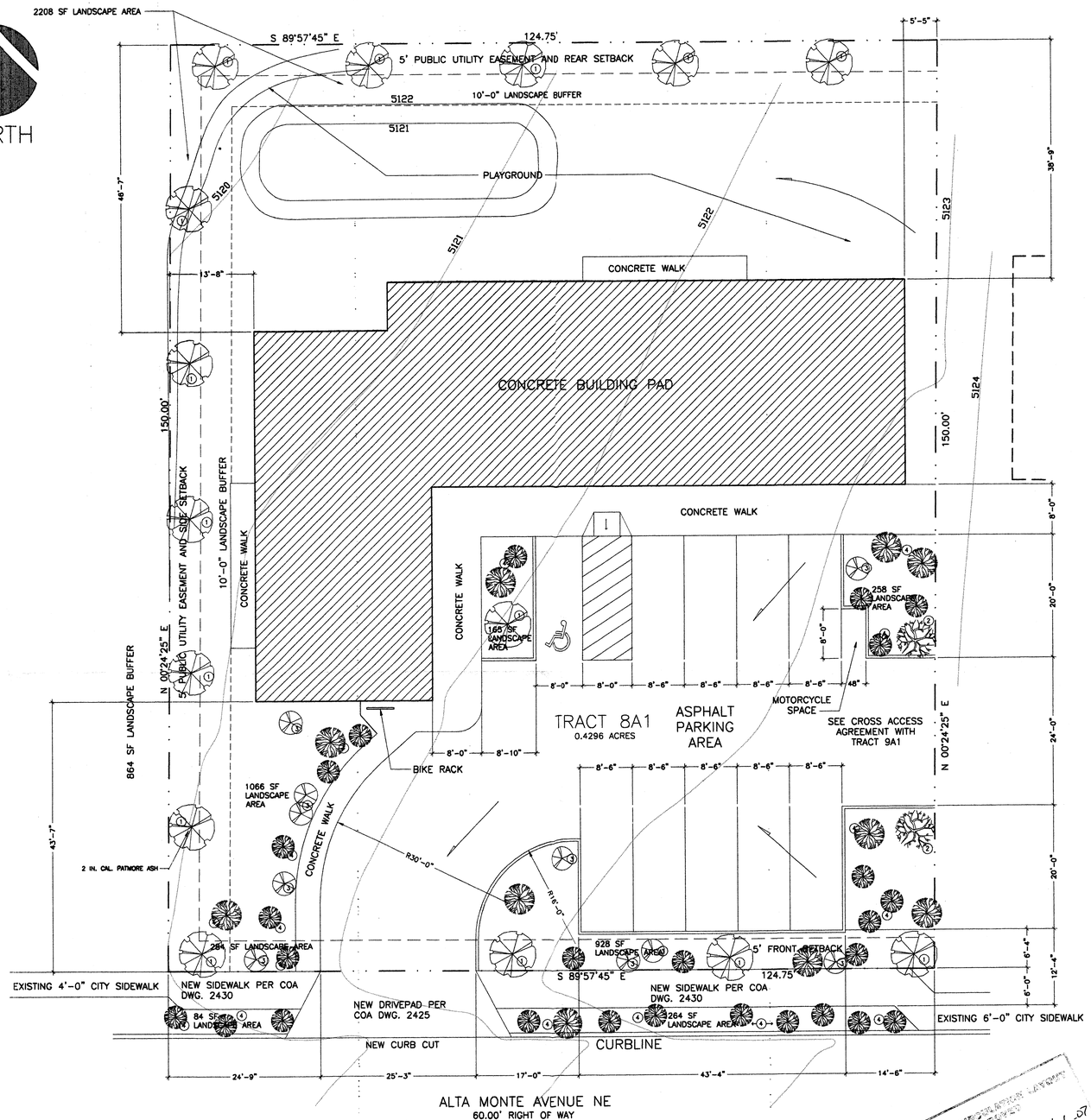
LANDSCAPE NOTES

DESIGN CRITERIA

1. Landscape and irrigation system maintenance shall be the responsibilty of the owner.
2. Landscape shall be watered by a complete underground irrigation drip system operated by automatic controller.
3. Plantings shall acheive a minimum 75% live ground cover at maturity.



VICINITY MAP NTS



SITE PLAN 1" = 10'-0"

LANDSCAPE AREA REQUIRED:	
GROSS SITE AREA	= 18,713 SF
BUILDING AREA	= 4322 SF
RIGHT-OF WAY	= 328 SF
NET SITE AREA	= 14,063 SF
15% OF NET AREA	= 2109 SF REQUIRED
LANDSCAPE AREA PROVIDED:	4973 SF
VEGETATIVE GROUND COVER REQUIRED:	1582 SF

LANDSCAPE SCHEDULE		
MARK	DESCRIPTION	SIZE
1	PATMORE ASH	2" CALIPER
2	BRADFORD PEAR	15 GALLON
3	DESERT WILLOW	5 GALLON
4	BUFFALO JUNIPER	1 GALLON

DRAWING INDEX	
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LEGAL DESCRIPTION
TRACT 8A1, PLAT OF TRACTS 8A1 AND 9A1, TRACT 6, BLOCK A, INDIAN ACRES SUBDIVISION

RECEIVED
NOV 05 2007
HYDROLOGY SECTION

DAY CARE CENTER
ALBUQUERQUE • NEW MEXICO

J. KORY BAKER • ARCHITECT
P.O. BOX 254 • ESTANCIA NM 87016
505 • 384 • 3112

SHEET NUMBER A1
DRAWN BY:
REVISIONS:
DATE: 3-12-07

STATE OF NEW MEXICO
J. KORY BAKER
NO. 2170
REGISTERED ARCHITECT
3.12.07

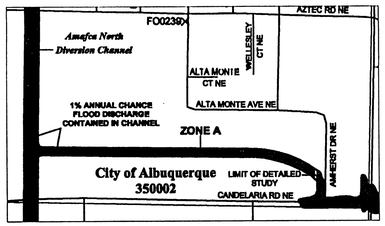
GRADING & DRAINAGE PLAN

THE PROPOSED DAY-CARE EXPANSION PROJECT IS LOCATED IN THE CANDELARIA-125 COMMERCIAL AREA OF THE CITY OF ALBUQUERQUE. THE GRADING AND DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

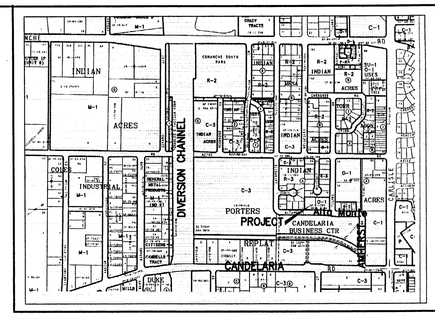
1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND IMPROVEMENTS, AND EXISTING STREET.
2. PROPOSED IMPROVEMENTS: A 4000 SF BUILDING, PRIVATE ASPHALT DRIVEWAY AND PARKING, NEW GRADE ELEVATIONS, DRAINAGE, AND LANDSCAPING COMPLIANCE IMPROVEMENTS/UPGRADING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION OF DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS WHICH CONTRIBUTE TO THE EXISTING FLOWS.

PRESENTLY, THE SITE IS ESTABLISHED AND USED AS A DEVELOPED ANCILLARY PLAYGROUND AREA FOR THE EXISTING FACILITY TO THE EAST. THE PLAYGROUND CURRENTLY IS 2/3 GRAVEL SURFACING LOCATED IN THE SOUTHERN AREA. THE SITE IS BOUNDED BY DEVELOPED MULTI-FAMILY ON THE NORTH /COMMERCIAL PROPERTY TO THE WEST. ALTA MONTE AVE. ON THE SOUTH IS A 40 FEET WIDE PAVED CITY MAINTAINED LOCAL STREET WITH SIDEWALK. THE SITE TERRAIN SLOPES FROM EAST TO NORTHWEST AT 5%.

THE SITE IS NOT WITHIN OR ADJACENT TO A DESIGNATED FEMA FLOOD HAZARD ZONE. DEVELOPED LOT RUNOFF WILL BE PERMITTED TO DRAIN TO THE STREET. FREE DISCHARGE OF PROJECT RUNOFF IS ACCEPTABLE SINCE DOWNSTREAM DRAINAGE FACILITIES EXIST. A PORTION OF SITE RUNOFF IS ROUTED THROUGH PROPOSED LANDSCAPING AS POINT RAINFALL, ...SEE CALCULATIONS.

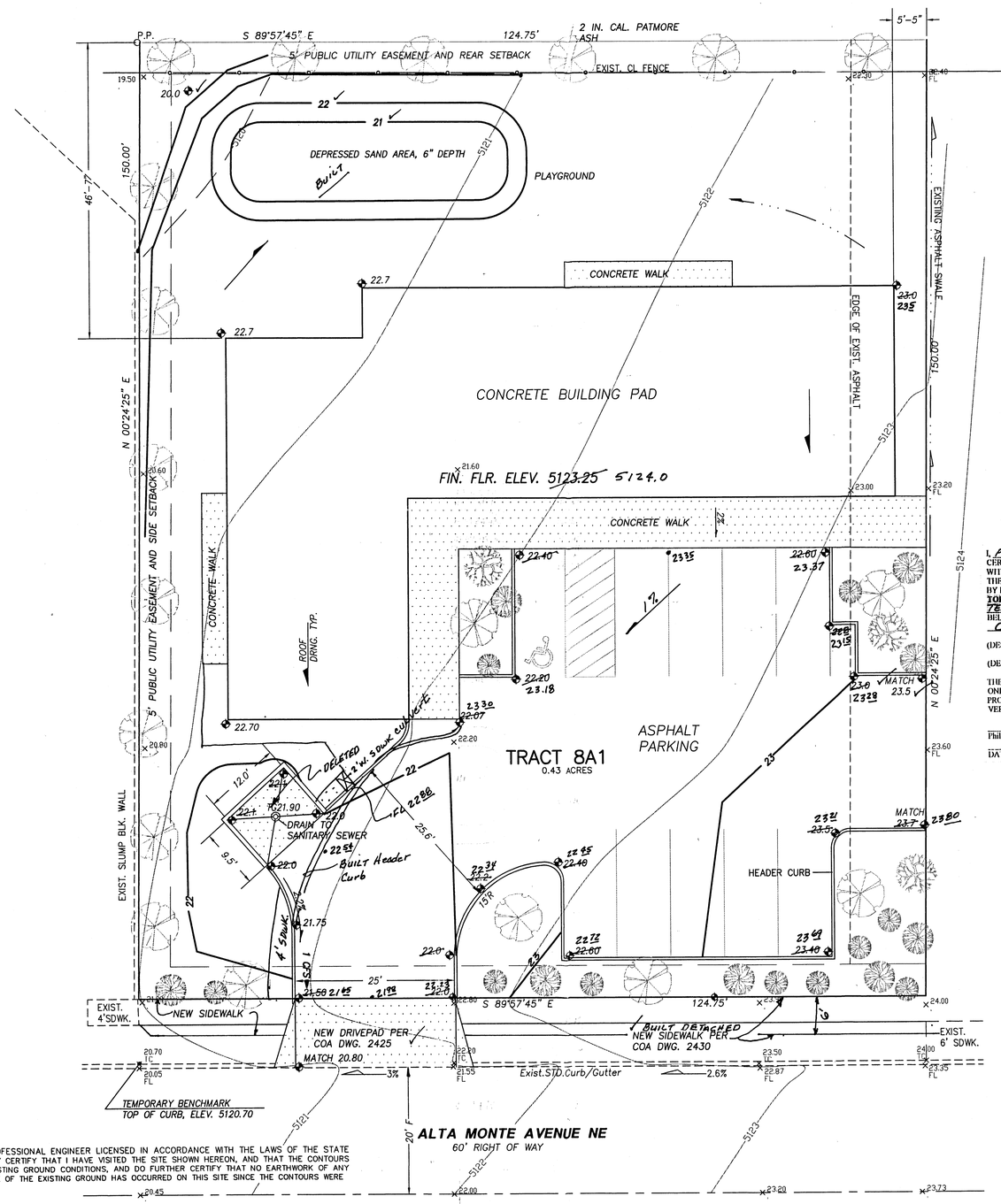


FIRM MAP PANEL # 351 F



Scale: 1" = 10'

VICINITY MAP ZONE G-16



NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION W/ UPDATES.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL.
5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1.
8. NEW ASPHALT PAVEMENT SHALL CONSIST OF 3" ASPHALT CONCRETE OVER 6" AGGREGATE BASE COURSE ON 8" COMPACTED SUBGRADE, 95% PROCTOR, ASTM D-1557

LEGEND

• AS BUILT 24.2 Elevation	
+24.0	EXIST. SPOT ELEVATION
10	EXIST. CONTOUR
◆ 24.0	NEW SPOT ELEVATION
54	NEW CONTOUR
	NEW SWALE
	DRAINAGE DIRECTION, EXISTING
FL	FLOWLINE
PP	EXISTING POWER POLE
NG OR G	NATURAL GROUND, EXISTING
R/C	REBAR AND CAP, EXISTING
CLF	CHAIN LINK FENCE, EXISTING
	NEW P.C.C., CONCRETE
TG	TOP OF GRATE (W/ ELEV.)

DRAINAGE CERTIFICATION

I, Philip W. Clark, NMPE 10265 OF THE FIRM Clark Consulting Eng'rs, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 3/3/07. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY Philip W. Turner, NMPS/20?? OF THE FIRM TERRAMETRICS, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY

(DESCRIBE ANY EXCEPTIONS) DELETED REFUSE

(DESCRIBE ANY DEFICIENCIES)

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Philip W. Clark, NMPE 10265

DATE 11/6/07

PROJECT DATA

LEGAL DESCRIPTION

TRACT 8A-1, BLOCK A, INDIAN ACRES SUBDIVISION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK (NAVD 88)

TOP OF CURB AT THE PROJECTION OF PROJECT SOUTHWEST CORNER SEE PLAN, ELEVATION = 5120.70, AS TIED FROM ACS CONTROL MONUMENT F-225 (ELEV. 5102.67) LOCATED @ THE SW QUADRANT OF LAFAYETTE/AZTEC

TOPOGRAPHIC DESIGN SURVEY DATA

COMPILED BY CLARK CONSULTING ENGINEERS, FEBRUARY 2007

RECEIVED NOV 07 2007 HYDROLOGY SECTION

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE, ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 Inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS

LOT AREA = 0.43 ACRES, WHERE EXCESS PRECIP. 'W' =0.88 In. [0.35]
PEAK DISCHARGE, Q100 = 1.1 CFS [0.6], WHERE UNIT PEAK DISCHARGE = 2.5 CFS/AC. [1.3]
THEREFORE: VOLUME 100 = 1374 CF [546]

DEVELOPED CONDITIONS (Includes Paved Parking)

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	~~0.00 Ac.(0%)~~	A	1.56[0.38]	0.53[0.13]
LANDSCAPING/Depress	0.15 Ac.(35%)	B	2.28[0.95]	0.76[0.28]
GRAVEL & COMPACTED SOIL	0.05 Ac.(12%)	C	3.14[1.71]	1.13[0.52]
ROOF - PAVEMENT	0.23 Ac.(53%)	D	4.70[3.14]	2.12[1.34]
	0.43 Ac.			

THEREFORE: $E_{Weighted}$ = 1.53 In.[0.87] &

Q100 =1.6 CFS VOLUME 100 = 2388 CF
Q10 =1.0 CFS VOLUME 10 = 1358 CF

DOWNSTREAM ANALYSIS

THE INCREASE OF RUNOFF RATE IS CONSIDERED MINIMAL FROM THE EXISTING CONDITIONS (0.5 CFS); THE DIFFERENCE WILL BE ROUTED INTO DEPRESSED LANDSCAPE AREA(S). THE REMAINING TWO-THIRDS OR 1 CFS WILL FREE-DISCHARGE TO THE STREET.

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PHILIP W. CLARK NMPE #10265

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER 11.6.07

Clark Consulting Engineers
19 Ryan Road
Edgewood, New Mexico 87015
Tele: (505) 281-2444 Fax: (505) 281-2444

DATE	REVISION
11-6-07	AS BUILT 24.2

TR. 8A-1 OF BLOCK A, INDIAN ACRES ALBUQUERQUE, NEW MEXICO
3301 ALTA MONTE AVENUE, NE

Grading & Drainage Plan

DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: 03CE-014	1 OF 1
CHECKED BY: PWC	DATE: 3/01/07	FILE #: G/D	